

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Ecological and Environmental Anthropology
(University of Georgia)

Wildlife Damage Management, Internet Center
for

2008

A Landscape of Possibilities: Seeking Food Security in Matutúine District, Mozambique

L. Jen Shaffer
University of Georgia

Follow this and additional works at: <https://digitalcommons.unl.edu/icwdmeea>



Part of the [Environmental Sciences Commons](#)

Shaffer, L. Jen, "A Landscape of Possibilities: Seeking Food Security in Matutúine District, Mozambique" (2008). *Ecological and Environmental Anthropology (University of Georgia)*. 35.
<https://digitalcommons.unl.edu/icwdmeea/35>

This Article is brought to you for free and open access by the Wildlife Damage Management, Internet Center for at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Ecological and Environmental Anthropology (University of Georgia) by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Essays

A Landscape of Possibilities: Seeking Food Security in Matutúine District, Mozambique

L. Jen Shaffer¹

Food security for many Africans requires exploiting a wide variety of resources. People living on the coastal savanna of southern Mozambique use the landscape's diversity to supplement domestic food production. This photo essay highlights the variety of resources used and problems faced in achieving food security in two communities in Matutúine District, Mozambique.

Keywords: agroforestry, biodiversity, bushmeat, ethnobotany, livelihood

Introduction

Ensuring a stable food supply is central to survival, whether a person lives on the streets of New York or the savannas of East Africa. The possibilities landscapes offer to people seeking food depend on site specific factors like climate, soil fertility, water availability, vegetation, and surrounding social context. Many rural Africans rely on their surroundings to meet basic subsistence needs for warmth, shelter, medicine, and food. This reliance ties local activities and cultural institutions directly to the African landscape.

The diverse coastal savanna landscape of southern Mozambique offers many possibilities for supporting human populations. Simultaneously, persistent drought, limited soil fertility, wildlife conflict, poverty, and historically, war, have limited opportunities for securing an adequate food supply. To reduce risk, households practice multiple livelihood activities including swidden agriculture, herding, hunting, gathering, and fishing. Occasionally they may also receive remittances from relatives living and working in South Africa to purchase additional food supplies.

Images accompanying stories about food security in Africa frequently emphasize assistance from government agencies and non-governmental organizations. However, aid circumstances vary and are unsustainable over the long term. Maintaining an extensive portfolio of livelihood activities ensures that a family can meet basic food needs in uncertain circumstances. This photo essay documents how the communities of Gala and Madjadjane, Matutúine District, Mozambique seek food security through the use of their surroundings and outlines the problems they face in this search.

¹ Dept. of Anthropology, University of Georgia

Maputaland Landscape (Photo 1)

Lagoa Piti, in the distance, is one of many freshwater and brackish lakes that dot the coastal savanna of Matutúine District. This savanna, forest, and wetland mosaic is part of the Maputaland Center – a biodiversity hotspot in southeastern Africa. Residents fish the lakes and rivers, harvest food, fuel, and medicines from the forests and woodlands, graze cattle and goat herds on the savannas, and practice swidden agriculture throughout the landscape. These human activities contribute to the shifting, mosaic pattern of vegetation.

**Fire and Historic Land Use (Photo 2)**

Humans use fire as a tool throughout southern Africa to clear fields, improve pasturage, hunt, collect honey, and discourage wildlife. While locals have fire management practices, negligence, unfavorable weather conditions, and lightning strikes can create uncontrolled burns. Encouraged by dry season winds, this wildfire raged for five days along the Rio Futí before finally dying. It uncovered historic wetland *machambas* (agricultural fields) from before 1986 when Mozambique's Civil War finally reached Matutúine District. Farmers constructed these raised beds to grow sweet potatoes and other crops along the Rio Futí, where water is easily accessible and flooding renews soil fertility. Like many of the native tree species, these *Eucalyptus* spp. trees resprouted from their bases within one month of the fire.



Machambas (*Photo 3, right*)

On school holidays Argentina works in her family's wet *machamba* with a hoe, much as her ancestors might have done over 100 years ago. Families maintain both wet and dry *machambas*. They grow sugar cane, sweet potato, banana, and vegetables in wet *machambas* during the cool, dry season (April – September). During the hot, rainy season (October – March), crops like peanuts, groundnuts, maize, manioc, tobacco, watermelon, and squash are planted in dry *machambas* located farther from water sources. Fruit trees, both wild and introduced species, are not removed when *machambas* are cleared for planting as they provide food even if the crops fail.

A Wide Variety of Horticulturas (*Photo 4, below*) Farmers in Gala and Madjadjane grow a variety of *horticulturas* (vegetables), like tomatoes, lettuce, *peri peri* (chilies), cabbage, carrots, garlic, and onions in addition to their staple crops of *milho* (maize), sweet potato, manioc, and sugar cane. These crops are grown under drought conditions in extremely low fertility soils – sometimes almost pure sand – without inputs like chemical fertilizers and pesticides. Surplus produce is sold or traded for staples and dry goods like rice, cooking oil, salt, soap, candles, and matches.



Storing Food (*Photo 5, right*)

Round *celeiros*, constructed from locally harvested materials, store grains and tubers. In the past, celeiros were much larger, holding enough grain to last through the hunger season (May – July) when no crops are available for harvest. Because of drought and wildlife conflict, many farmers must now purchase some of the staple grains their families consume. As a result, many of the celeiros built today are much smaller.

**Keeping Chickens** (*Photo 6, below*)

No rural Mozambican home is complete without at least one or two chickens strutting around the yard. Women traditionally raise chickens for food, sale, and use in ritual practices. The animals are easy to raise and limit the population of insect pests around the house and garden. Farmers lock up their chickens at night, but occasionally a jackal, python, or simba (*Genetta tigrina*) steals an easy dinner.



**Herding Cattle And Goats (Photo 7, above)**

Cattle are central to Mazingiri Ronga culture. Cattle are given as *lobola* (traditional bride payment), and a wealthy man owns many cattle. The high chief must sacrifice a bull and a goat when petitioning the ancestors for rain each year. During the Civil War (1986-1992) in Matutúine District, many people lost their herds. Overgrazed dunes have recovered, but the losses have had a demoralizing effect on local culture. Cattle are expensive and residents have begun rebuilding herds by starting with goats, trading up for cattle when they are able. Many community members see a link between the current long-term drought and their inability to make a proper rain ceremony ritual sacrifice.

Making Sura (Photo 8, right)

Anton shaves off the top layer from a kindu (*Phoenix reclinata*) stump to encourage the flow of sap. He will collect the sap twice a day for three to four months. Once fermented, *sura* (palm wine) tastes like soda pop but contains vitamins and nutrients. Although his family will drink some, Anton is harvesting and producing wine for sale in the community. South of Gala, much of the *sura* production is sold over the border in nearby South Africa and contributes a significant amount to the local economy.



Hortas (Photo 9)

Many people maintain small *hortas* (home gardens) with medicinal plants, drought-tolerant vegetables, and fruit trees at their homesteads in Gala and Madjadjane. Jobe, a 71 year old farmer, planted these blossoming mango trees when he moved to Gala before the Civil War many years ago. Clusters of certain fruit tree species indicate a human presence on the savanna landscape, either currently or historically. Common homestead fruit trees include domesticates and semi-domesticates like cajueirra (*Anacardium occidentale*), bomu (*Citrus limon*), manga (*Mangifera indica*), mapezua (*Psidium guajava*), mafurreira (*Trichilia emetica*), ncanhi (*Sclerocarya birrea*), and nsiva (*Dialium schlechteri*).

**Masala And Macuácuá (Photo 10)**

Masala (*Strychnos spinosa*) and macuácuá (*Strychnos madagascariensis*) are two of the most commonly harvested fruits in Gala and Madjadjane. Masala pulp, on the left, has a sweet-tart flavor reminiscent of apples and bananas. Macuácuá, on the right, ranges from very sweet to bitter depending on the tree. Only the fruit pulp of both species is eaten, as the seeds contain strychnine. Residents dry and pound macuácuá pulp to produce a medicinal oil and *mfuma*, an edible paste which can be stored for long periods. Sugar, or preferably honey, is added to the paste to reduce the bitterness. Older residents say that when their crops failed during the big droughts of 1964 and 1965, people survived by eating *mfuma*.



A Bowl Of Tihaca (Photo 11)

Tihaca is the fruit of the cacana plant (*Momordica balsamina*), an herb that grows in open woodland habitat and disturbed areas. Both the fruit and leaves are eaten as vegetables. Tihaca can be eaten raw or cooked and has the flavor and consistency of fresh, crisp cucumber. When very ripe, tihaca has an orange color and the seeds inside are scarlet. Harvested wild foods in this region of Maputaland come from trees (minimum 32 species), vines, herbs, and shrubs (minimum 17 species), mushrooms (8 species), and animals (minimum 10 species).

Dried Fish (*Photo 12*)

Large amounts of fish, like this peixe preto (*Clarias* sp.), a large catfish, are dried, smoked, and sold for consumption in Matutuine District, in Maputo, and over the border in South Africa. Artisanal fishing of *Tilapia* sp. and *Clarias* sp. in coastal Lakes Piti and Ntiti provides direct income and protein to 84% of Gala households. Thirty percent of Madjadjane households catch these fish species in the Rio Futi for personal consumption. Rivers may be fished all year. Lakes are closed from October to May to give stocks a rest. In the past, the local chief controlled the timing of the fishing season; now the government regulates fishing through licensing as well as determining fishing seasons.

A Sweet Tradition (*Photo 13, following page*)

Bee boxes are scattered throughout the woodlands and machambas of Madjadjane. Apiculturalists put out colony boxes in both the cool, dry season and hot, wet season to take advantage of different tree flowering periods and help pollinate crops. Traditionally, apiculturalists collected honey and combs from wild trees using fire. This often resulted in uncontrolled wildfires that destroyed forest and homesteads and killed bee colonies. Swiss NGO Helvetas has worked with several honey collectors in Madjadjane – providing technical training and start-up funds for equipment – to develop a more sustainable way to collect honey. Members of the apiculture cooperative bottle and sell their honey locally and in Maputo's Mercado Central.



Caçadores Furtivos*(Photos 14a & b)*

Weapons confiscated (a) from poachers at Reserva Especial de Maputo, a wildlife reserve adjacent to Gala and Madjadjane, include old rifles, bows and arrows, and snares. Although there are a few residents who poach within the reserve, most of the hunters are young men coming from larger towns. The bushmeat is sold in small bars and shops in these larger towns in Matutuine District. Young men also sell bushmeat from suitcases (b), like this mangoule (*Cephalophus natalensis*), to motorists along the main road between Madjadjane and the South African border. A recently discovered poaching operation involved coordination between reserve guards and local residents. The guards were subsequently fired. The poachers involved served jail time and paid monetary compensation to the Reserve for the lost wildlife.



Wildlife Conflict (Photos 15a & 15b)

Living next door to a wildlife reserve is not easy. Frequently, elephants, hippos, bush pig (*Potamochoerus larvatus*), vondo (*Thryonomys swinderianus*), and monkeys (*Cercopithecus aethiops*, *C. mitis*) destroy growing plants and consume crops before they are harvested. These elephant feet come from an individual that was shot following several attempts to herd it back into

Reserva Especial de Maputo and behind an electrified fence. The elephant had been raiding crops and aggressively attacking residents of Madjadjane. Reserve guards shot the elephant and the meat was distributed to the community. Similar actions have been taken for problematic hippos. While it is illegal to hunt, residents of Gala and Madjadjane are allowed to catch and eat bush pigs and vondo that they find eating crops in their machambas.



Women And Children First (Photo 16)

Psikelekedana is a uniquely Mozambican art and a form of social commentary. This piece depicts villagers fleeing FRELIMO and RENAMO armies. Women and children go first, while men follow to protect the family from behind. The Civil War (1975-1992) caused great upheaval in Matutúine District between 1986 and 1992. Some people were moved into communal villages, others were killed. Military on both sides stole cattle for food. Homesteads were burned and a great many people fled to South Africa, Maputo, and Swaziland. The people who fled took food, water, and few personal belongings. Those that stayed, hid in the bush subsisting mainly on wild foods.

Border Markets (Photo 17)

A young South African man sells tomatoes from his family's KwaZulu-Natal farm at the border market in Phuza, Matutúine District, Moçambique. Every Wednesday and Saturday, Mazingiri Ronga and Zulu farmers and fishers on both sides of the border meet to buy and sell fish, produce, sura, clothes, housewares, goats, chickens, construction materials, tobacco, and alcohol. The fence splitting this region in two artificially divides families, shared culture, wildlife populations, and local ecosystems. Many families in Madjadjane and Gala have parents and adult children working in KwaZulu-Natal who send home occasional remittances. Some men have wives and children on both sides of the border, providing the entire family access to arable land and cash.

Esteira Production (Photo 18)

A thatched roof hut provides shade, rain shelter, and wind protection as Alfredo and Robina, a husband-wife team, produce *esteiras* (floor mats). For over 20 years, Alfredo has cut mbungo (*Cyperus papyrus*) almost every day along the Rio Futí to make these mats. The proceeds from selling *esteiras* along the road and in Maputo have paid for primary school for their six grown children, clothes, and food that they cannot grow themselves. Madjadjane has a large community of *esteira* makers, drawn there by the availability of mbungo growing on the Rio Futí's banks and a large market in nearby Maputo.

Making Charcoal From The Bush (*Photos 19a-e*)

Charcoal production is a recent addition to household economic practices in Madjadjane. Charcoal is used by many homes in Maputo and its outlying suburbs for cooking and heat. Community woodcutters (a), like Enoque, harvest non-precious woods, dead wood, and trees that are not providers of fruits or medicines. People primarily use machetes to cut wood, although a few men own chainsaws. Currently, the community has ten families (about 15%) producing charcoal. Wood is stacked in neat piles roughly 3m x 2m x 1m (b). Holes in the earthen mound covering the stack allow air circulation (c) as the wood slowly burns. Mounds like this one will produce 30 to 35 sacks (d) of charcoal that sell for 100 MTn each (\$4 USD) along the road between Maputo and the South African border. Farmers often use the enriched soils of old mounds to grow watermelon (e) and other crops.



Community-based Ecotourism (Photo 20)

Increased recognition of the Maputaland landscape's high biodiversity is strengthening conservation laws protecting resources in the region. Although communities retain access to natural resources for personal consumption, residents of Gala and Madjadjane are turning to new ways to exploit the landscape and generate income. Both communities have community-run ecotourism lodges, built with assistance from the IUCN and Swiss NGO Helvetas, that allow visitors to experience the beautiful landscape and interesting culture of this region. Activities include dancing, story telling, butterfly and medicinal plant walks, bird watching, hippo and elephant tracking, and fishing. Recent road improvements and word of mouth recommendations will hopefully expand current business prospects for these lodges.



Conclusions

The communities of Gala and Madjadjane use the biological and physical diversity of the Maputaland landscape to survive, and their livelihood practices reflect the environmental conditions they experience. While it has not always been possible to achieve full food security, diversified livelihood strategies have allowed residents to survive under conditions of drought, wildlife conflict, poverty, and war. Paved roads, improved communication networks, future electrification, and the relocation of Gala for a transfrontier wildlife corridor will bring further changes to residents. Whatever these changes may bring for the people of Gala and Madjadjane, it is certain that the Maputaland landscape will change as a result.